



# Apex Microtechnology

## Materials Substance Report

**Model:** VRE410AS

**Print Time:** 9/19/2013 10:14:43 AM

**RoHS Compliant:** Yes

**Lead Free:** No

<b>Bonding Island Substances</b>	<b>Total Weight (g)</b>
NONE	N/A
<b>Capacitor Substances</b>	<b>Total Weight (g)</b>
NONE	N/A
<b>Die Substances</b>	<b>Total Weight (g)</b>
Aluminum	6.40E-6
Epoxy	4.95E-5
Gold	3.89E-6
Silica	5.70E-5
Silicon	1.55E-3
Silver	1.31E-4
<b>Encapsulant Substances</b>	<b>Total Weight (g)</b>
NONE	N/A
<b>Frame Substances</b>	<b>Total Weight (g)</b>
NONE	N/A
<b>Header Substances</b>	<b>Total Weight (g)</b>
NONE	N/A
<b>Lead Frame Substances</b>	<b>Total Weight (g)</b>
NONE	N/A
<b>Lid Substances</b>	<b>Total Weight (g)</b>
Alumina	6.73E-1
Calcium Oxide	3.70E-3
Iron Oxide	7.50E-3
Magnesium Oxide	1.50E-2
Silica	2.20E-2
Titanium Oxide	2.60E-2



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**Pin Substances**

	<b>Total Weight (g)</b>
Copper	2.35E-1
Lead	6.16E-5
Phosphorous	4.90E-4
Silver	3.78E-4
Tin	3.08E-2
Zinc	3.78E-4

**Silicone Substances**

	<b>Total Weight (g)</b>
Epoxy	4.04E-3
Magnesium Silicate Hydrous	2.00E-3
Silica	2.00E-3

**Solder Substances**

	<b>Total Weight (g)</b>
NONE	N/A

**Substrate Substances**

	<b>Total Weight (g)</b>
Alumina	3.82E-1
Calcium Oxide	2.10E-3
Iron Oxide	4.20E-3
Magnesium Oxide	8.50E-3
Silica	1.30E-2
Titanium Oxide	1.50E-2

**Thickfilm Substances**

	<b>Total Weight (g)</b>
Cadmium Oxide	3.81E-5
Glass	4.76E-3
Gold	1.17E-3
Lead Oxide	8.90E-5
Silver	9.87E-3

**Wire Substances**

	<b>Total Weight (g)</b>
Gold	2.23E-4



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## Substances Present in This Model

Substance	Total Weight (g)
Alumina	1.05E+0
Aluminum	6.40E-6
Cadmium Oxide	3.81E-5
Calcium Oxide	5.80E-3
Copper	2.35E-1
Epoxy	4.09E-3
Glass	4.76E-3
Gold	1.40E-3
Iron Oxide	1.17E-2
Lead	6.16E-5
Lead Oxide	8.90E-5
Magnesium Oxide	2.35E-2
Magnesium Silicate Hydrous	2.00E-3
Phosphorous	4.90E-4
Silica	3.71E-2
Silicon	1.55E-3
Silver	1.04E-2
Tin	3.08E-2
Titanium Oxide	4.10E-2
Zinc	3.78E-4

**Sum of All Substances Present in This Model (g)** 1.47E+0